



TUMAMOC LANDFILL NEWSLETTER

JULY 2005

Construction of New Groundwater Monitor Wells

City of Tucson-Environmental Services (COT-ES) drilled and constructed four new groundwater monitoring wells near the Tumamoc Landfill in August 2004. Two of these wells (WR-454A and WR-454B) are located at the southeast corner of Greasewood Rd. and Starr Pass Blvd. The other wells (WR-455A and WR-455B) are near Coati Dr. and



Drilling Monitor Well WR-455A

Greasewood Rd. The four new wells will help COT-ES to monitor and assess the water quality at Tumamoc Landfill. They will be sampled semi-annually along with the other ten groundwater monitor wells in the area.

Groundwater Monitoring Results – February 2005

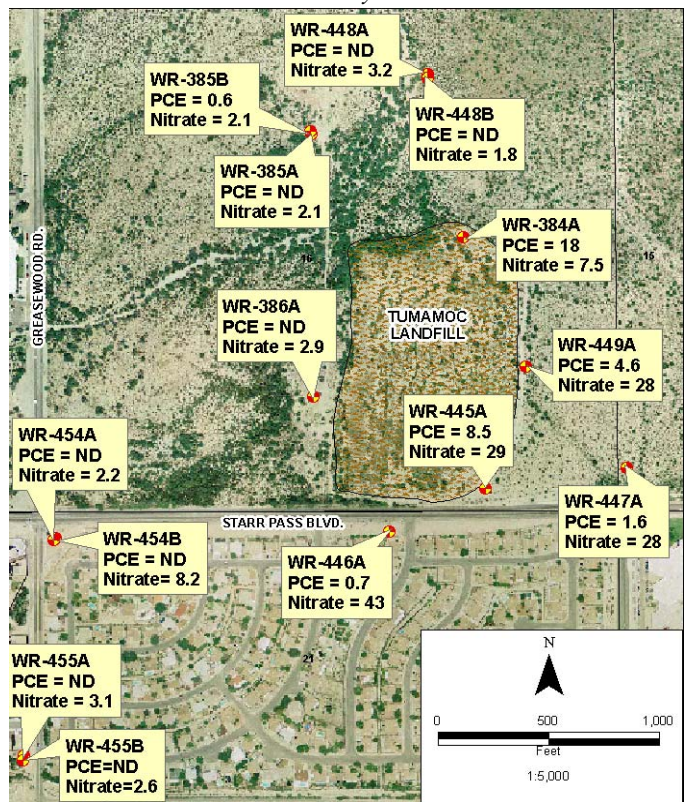
The fourteen groundwater monitor wells around the Tumamoc Landfill were sampled in February 2005 as part of the semi-annual water quality monitoring schedule. Two wells showed tetrachloroethylene (PCE) concentrations above the aquifer water standard (AWQS) of 5.0 ug/L. Nitrate concentrations were also above the AWQS

of 10 mg/L in four wells. PCE is an industrial solvent, while nitrate may be associated with agricultural use or human/animal waste.

The elevated levels of PCE and nitrate are found at different locations of the landfill, as shown on the map below. Concentrations for PCE are in micrograms per liter (ug/L) and nitrate concentrations are in milligrams per liter (mg/L). Non-detect (ND) means the concentrations were below the laboratory detection limit.

There are elevated nitrate concentrations south of the landfill, while the groundwater monitor well with the highest PCE concentration is north of the landfill.

*PCE and Nitrate Concentrations in Groundwater Monitor Wells
February 2005*



Landfill Gas Monitoring Results – First Half 2005

In addition to monitoring the groundwater at Tumamoc Landfill, COT-ES also monitors soil gas on a quarterly basis to ensure that landfill gas is not migrating off the site.

COT-ES monitored the nine perimeter landfill gas probes at Tumamoc in March and June of 2005 for methane, carbon dioxide, and oxygen. The ambient (sea level) composition of air is methane 0%, carbon dioxide 0.03% and oxygen 20.9%.

All probes showed compositions near ambient air and methane was not detected in any of the probes. The lack of methane in the landfill gas probes indicates the Tumamoc Landfill has a minimal impact on the surrounding soil gas.

Your City of Tucson Water Supply Not Affected

Tucson Water customers living in the area near the Tumamoc Landfill receive their water from either Avra Valley, west of the Tucson Mountains, or from other Tucson Water facilities located miles away from the landfill. Tucson Water regularly monitors all water delivered to customers to ensure it meets local, state and federal drinking water standards.

If you would like additional information please call City of Tucson-Environmental Services, Engineering and Technical Support at (520) 791-5414.



Printed on Recycled Paper



**CITY OF TUCSON
ENVIRONMENTAL SERVICES
ENGINEERING & TECHNICAL SUPPORT
100 N STONE AVE, 2ND FLOOR
TUCSON, AZ 85701**

NEIGHBOR